

HS2 Approach to Dust Management

At HS2, we are committed to maintaining high air quality standards and minimising dust impacts around all of the HS2 sites.

Air quality monitoring

HS2 undertakes indicative particulate matter (PM10) monitoring, on the boundaries of our 'medium' and 'high' dust risk sites (as determined by best practice guidance), as a means to ensure the effectiveness of the dust mitigation measures on the HS2 sites. The concentrations measured are not at relevant exposure (which would be lower through dispersion), but rather on the site boundary as a management tool. These monitors have trigger alerts, set in line with National Best Practice at 190ug/m³, and are used as a tool to provide near-real time feedback to our construction teams when PM10 concentrations might be affecting local air quality, enabling them to take rapid and responsive measures to control emissions through mitigation measures.

We are open and transparent about our monitoring and publish monthly air quality monitoring data at gov.uk.

Dust control measures

We have a number of dust mitigation measures in place at all the HS2 sites in Ealing that have been discussed with the London Borough of Ealing and include:

- An appointed dust champion for each subcontractor to undertake a daily dust assessment and to coordinate dust management measures;
- Damping down of potentially dusty site works. This includes open site working areas, haul roads, stockpiles, excavation works. The dampening down includes an assortment of measures such as water cannons, bowsers and sprinkling systems;
- Machine sweeping of the internal site haul roads;
- Wheel washing at the site exit to removed mud and dust from vehicles leaving the site;
- Road sweeping during site working hours primarily to removed dust and mud tracked out of site and to remove any accumulation of dust on the highway; and
- Pavement sweeping of the residential areas when there is an accumulation of dust during dry weather.

We also undertake regular specialist Air Quality Audits on HS2 sites to review the controls in place and to provide specific improvement recommendations where needed.

Saharan dust event

In February 2025, prior to the recent complaints about dust from residents, the UK has experienced a 'Saharan dust' event, originating from the Sahara Desert in North Africa. This occasionally occurs a few times a year. The dust storms coincide with wind patterns which carries the dry particles over vast distances. It can leave a reddish layer of dust, often found on buildings, street furniture and vehicles. This correlates with the complaints the London Borough of Ealing and HS2 have received from residents about a red dust that is on their windows and blocking their gutters.